

WHAT IS CLAIMED IS:

1. A method for pointing at information in a multi-dimensional space, comprising the steps of:

(a) setting a portion of a full screen as a pointing screen;

(b) determining whether desired information to be pointed at is included in the set pointing screen;

(c) when it is determined that the desired information is not included in the pointing screen, moving the pointing screen so that the desired information is included in the pointing screen; and

(d) pointing at the desired information included in the pointing screen when it is determined that the desired information is included in the pointing screen or after step (c),

wherein at least one of steps (a), (c), and (d) is performed by a user's motion in at least one direction selected from up, down, forward, backward, to the left, and to the right.

2. The method of claim 1, wherein the full screen includes a plurality of pieces of information.

3. The method of claim 1, wherein step (c) comprises the sub-steps of:

(c11) determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen;

(c12) moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the left of the pointing screen, and proceeding to step (d); and

(c13) moving the pointing screen to the right so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the right of the pointing screen, and proceeding to step (d).

4. The method of claim 1, wherein step (c) comprises the sub-steps of:

(c21) determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen;

(c12) moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the pointing screen, and proceeding to step (d); and

(c13) moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the pointing screen, and proceeding to step (d).

5. The method of claim 1, wherein step (c) comprises the sub-steps of:

(c31) determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen;

(c32) moving the pointing screen to the left so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the left of the pointing screen;

(c33) moving the pointing screen to the right so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the right of the pointing screen;

(c34) determining whether the desired information is included in the pointing screen moved in step (c32) or (c33) and proceeding to step (d) when

it is determined that the desired information is included in the moved pointing screen;

(c35) determining whether the desired information is located above or below the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen;

(c36) moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the moved pointing screen, and proceeding to step (d); and

(c37) moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the moved pointing screen, and proceeding to step (d).

6. The method of claim 1, wherein step (c) comprises the sub-steps of:

(c41) determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen;

(c42) moving the pointing screen up so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located above the pointing screen;

(c43) moving the pointing screen down so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located below the pointing screen;

(c44) determining whether the desired information is included in the pointing screen moved in step (c42) or (c43) and proceeding to step (d) when it is determined that the desired information is included in the moved pointing screen;

(c45) determining whether the desired information is located on the left or right of the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen;

(c46) moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the left of the moved pointing screen, and proceeding to step (d); and

(c47) moving the pointing screen to the right so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the right of the moved pointing screen, and proceeding to step (d).

7. The method of claim 1, wherein the user's motion is sensed by a sensor.

8. The method of claim 7, wherein the pointing screen is moved by moving the sensor beyond at least one of a horizontal motion range and a vertical motion range, when it is determined that the desired information is not included in the pointing screen in step (c), said at least one of the horizontal motion range and the vertical motion range corresponding to at least one range in which the sensor can be moved to the left/right and upward/downward, respectively, to point at the desired information in step (d).

9. The method of claim 1, wherein in step (a), at least one of a horizontal size and a vertical size of the pointing screen is set.

10. The method of claim 1, wherein in step (a), an initial position which is initially pointed at within the pointing screen is set.

11. The method of claim 1, wherein in step (a), a speed at which the pointing screen is moved is set.

12. The method of claim 1, wherein in step (a), a degree of reaction to the user's motion of a pointer displayed in the pointing screen, is set.

13. The method of claim 1, wherein the full screen corresponds to a graphical-user interface screen.

14. The method of claim 7, wherein the sensor performs a unique pointing function like a mouse.

15. The method of claim 1, wherein in step (d), the desired information pointed at is executed.

16. The method of claim 7, wherein the sensor is included in an information input device.

17. The method of claim 9, wherein the step (a) comprises preparing a size menu used for setting said at least one of the horizontal size and the vertical size.

18. The method of claim 10, wherein the step (a) comprises preparing a size menu used for setting the initial position.

19. The method of claim 11, wherein the step (a) comprises preparing a speed menu used for setting the speed at which the pointing screen is moved.

20. The method of claim 11, wherein the step (a) comprises preparing a reaction menu used for setting the degree of reaction of the pointer.

21. A method for pointing at information in a multi-dimensional space and performing functions of a mouse, the method comprising:

an information selection step of creating a pointing screen at a portion of a full screen at a user's option such that the pointing screen includes at least one piece of information to be executed; and

an information execution step of executing the information included in the pointing screen by clicking the information.